HIV, TOBACCO USE, & THE HEALTHCARE PROVIDER'S ROLE IN TOBACCO CESSATION

Purpose

While the current smoking prevalence for all adults in the United States is 16.8% percent, the rate of smoking is estimated to be at least two to three times higher among adults living with HIV. Studies have shown that as many as 84 percent of HIV-positive patients who use tobacco want to quit smoking. Despite this expressed desire, HIV-positive patients have lower rates of successful cessation from tobacco than the total population. Advanced treatments are helping patients with HIV live longer lives. Tobacco use, however, continues to pose challenges that can hinder HIV, primary, and psychiatric care (CDC, 2016; Reddy, Parker, & Losina, 2016; Helleberg, May, & Ingle, 2015)

Why Is Tobacco Cessation Important for Treating HIV Patients?

Patients with HIV/AIDS and using tobacco have compounded health difficulties. HIV-positive smokers face the same tobacco-related risks—cardiovascular disease, stroke, and cancers associated with tobacco use—as their peers without HIV. However, for HIV-positive patients, the susceptibility to bacterial pneumonia is two to three times higher than for non-smokers. For people with HIV, tobacco use can also increase the likelihood of the onset of opportunistic infections, as the body's immunological response to antiretroviral therapy may be weakened. Patients who successfully quit tobacco enjoy the benefits of improved cardiovascular health as well as a reduction in HIV/AIDS-related symptoms.

Psychiatrists and other mental health care providers are especially equipped to initiate tobacco cessation counseling as they usually have longer clinical interactions with patients and have the best understanding on treating addictions.

Impact on Medications

Providers who care for HIV-positive patients with mental illness must consider the effect smoking tobacco has on the metabolism of psychiatric medications, and educate their patients. For example, the efficacy of medications such as clozapine and olanzapine, drugs which are used for psychosis and psychotic depression, can be diminished because smoking increases the body's clearance of these medications by more than 90 percent. Smoking also increases the body's clearance of haloperidol, a drug commonly used to treat schizophrenia, by 44 percent, decreasing the effectiveness of the medication. These metabolic changes can make antipsychotics, tricyclic antidepressants, and other medications metabolized by CYP1A2 less effective.

Considerations and Barriers for Tobacco Cessation in HIV-Positive Populations

Health Care Coverage

On May 2, 2014, the U.S. Departments of Health and Human Services, Labor, and the Treasury issued guidance on insurance coverage of tobacco cessation as a preventive service under the Affordable Care Act. The guidance clarifies that insurance plans should offer access to all U.S. Public Health Service-recommended tobacco cessation medications and counseling without cost sharing or prior authorization.

Access to pharmacotherapy is problematic for HIV-positive patients because they often disproportionately fall into the low-income bracket or have little access to premier insurance options. Many state Medicaid programs cover one form of tobacco cessation, but not all evidence-based treatments are covered under each state program. All state Medicaid programs and the District of Columbia's Medicaid program cover nicotine patches or gum and bupropion, but not all state programs cover nicotine inhalers, nasal spray, lozenges, or varenicline. Furthermore, only a portion of all state Medicaid programs cover group counseling (31 states), individual counseling (43 states), or phone counseling (23 states) for tobacco use disorder.

Cultural Barriers

Some HIV-positive smokers continue to smoke because of long-held, false beliefs that it can benefit their health. Many HIV-positive patients experience uncomfortable or painful somatic symptoms related to their HIV. In lieu of other treatments, some patients rely on cigarette smoking to relieve the pain. Furthermore, patients with co-morbid mental illness may also believe that smoking "calms their nerves," when smoking is probably only helping the patient recover from a nicotine withdrawal. According to one study, male HIV-positive smokers concluded that they would not live long enough to see the negative effects of their tobacco use (Reynolds, 2009). Recent evidence on the life expectancy of HIV-patients and the burden of tobacco use has disproven this falsely-held belief.

Tobacco Cessation Treatment Options for Patients Living with HIV

Research suggests that brief, less than three-minute, tobacco dependence interventions are effective in engaging HIV-positive smokers in tobacco cessation. The patient's first attempt at tobacco cessation is not usually successful and may require a mix of therapies or treatments to successfully reach cessation. A history of mental illness (in particular, psychiatric symptoms due to trauma) may impair the efficacy of smoking cessation interventions (Reynolds, 2009). Patients and providers may decide to address these issues prior to engaging in smoking cessation treatment.

Prescribing tobacco cessation medications may be useful for smokers who wish to quit smoking immediately, but some patients may prefer a more-gradual approach, with a reduction in the number of cigarettes being the end goal. Thus, the needs of each HIV-positive patient should be considered and may best be approached by utilizing multiple cessation options tailored to each individual patient, including medications, counseling, telephone hotlines, and smartphone or Web-based technology.

Medications

Medications have been shown to be the most promising tool for tobacco cessation with HIV-patients. The two major forms of medications used for tobacco cessation are varenicline and bupropion. Varenicline has continually been associated with higher rates of abstinence from smoking and can be considered a first-line measure. Bupropion has been shown to be more effective in combination with nicotine replacement therapies rather than as a monotherapy.

Nicotine Replacement Therapy

Many patients living with HIV may prefer to use nicotine replacement therapies (NRTs) such as nicotine patch, gum, and lozenges. While NRTs have been shown to not affect antiretroviral therapy treatment, rates of abstaining from smoking are lower among patients who used only NRTs (over varenicline).

Counseling

Counseling (including motivational interviewing and cognitive behavioral therapy) has been shown to be effective as a tool in helping HIV-positive smokers remain abstinent from tobacco. The levels of highest efficacy have occurred when counseling is combined with other treatment tools, such as NRTs.

1-800-Quitnow Hotline

Evidence from the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Disease Control and Prevention (CDC) supports the notion that national quit lines are an accessible tool across diverse populations, and they can be helpful in providing social support to individuals who are undergoing counseling or using medication. Guidelines from the Tobacco Use and Dependence Guideline Panel noted that rates of abstinence from

tobacco among quit line users was 12.7% for counseling alone and 28.1% for counseling plus medication. There is currently no data or research to indicate whether HIV-positive patients are more or less likely to abstain from smoking after utilizing their state quit line.

Using Mobile Phone Apps or Texts

A 2013 study in the American Journal of Preventive Medicine found that many tobacco cessation mobile phone apps had little to no inclusion of best practices for assisting a patient in their tobacco cessation (Abroms, Westmaas, Bontemps-Jones, Ramani, & Mellerson, 2013). However, promising evidence has shown that text message-based tobacco cessation programs that provide tips and support can double the likelihood of cessation (Müssener et al., 2015; Haug, Meyer, Dymalski, Lippke, & John, 2012). Several apps from the National Cancer Institute, including Quit START and NCI Quit Pal, have the referral and support tools that increase the likelihood of cessation. A list of these tools can be found at www.smokefree.gov.

Methods for HIV Health Care Providers to Initiate Tobacco Cessation

Psychiatrists and other direct mental health care providers are especially equipped to initiate tobacco cessation counseling as they usually have longer clinical interactions with patients and the best understanding on treating addictions. A common set of strategies for providers to check a patient's tobacco use and to initiate cessation is the Five A's—Ask, Advise, Assess, Assist, and Arrange. These strategies do not need to be implemented by just the patient's primary clinician or health care provider. Nurses, medical assistants, and other health care providers can play a vital role by inquiring about and documenting tobacco use histories. This information can then serve to alert psychiatrists, psychologists, and other mental health providers as they work with these patients.

Following are the Five A's strategies:

1. *Ask:* Ask all patients about their tobacco use during each visit to encourage their ability to move forward with cessation. If the patient says they have quit within the last several years, congratulate the patient but also periodically check their tobacco use during future clinical visits.

2. *Advise:* Provide patients with clear, strong, and personally tailored suggestions or cues to make them aware that tobacco use can complicate their health due to HIV.

3. *Assess:* Assess a patient's readiness by asking if they are ready to quit in the next 30 days. If a patient says they are not able to quit, motivational interviewing may help facilitate the patient's readiness to quit.

4. *Assist:* Assist the patient in establishing a plan for quitting smoking when they ready to quit. Doing so will give patients better guidance for which treatments will work best to meet their needs. Following are the four major components of planning that should be done to ensure a patient's success:

- Help the patient set a quit date. Ideally, the quit date should be within 2 weeks.
- Ask the patient how they will tell their family, friends, and coworkers about quitting and how they will request understanding and support.
- Let the patient know to anticipate challenges to their quitting attempt, particularly during the critical first few weeks (e.g. withdrawal).
- Help the patient formulate a list of daily places in which tobacco products should be removed. This will assist them in consciously thinking about where they must take extra precautions.
- After setting up the plan, offer the patient the combined options of counseling, medications, and NRTs.

5. *Arrange:* After providing the patient with all the treatment options, refer the patient to counseling services if they believe it will assist with their quit plan. After the initial visit, it is important to follow-up with the patient, whether or not the patient receives a referral to counseling. It is recommended to follow up with a patient on their quit date to check their progress and to also schedule a follow-up visit one month after their quit date.

CPT and HCPS Codes for Reimbursement

Providers treating patients during tobacco cessation may be eligible for reimbursement through Medicare, Medicaid, and many insurance companies. The rate of coverage by insurance companies can vary by company. For Current Procedural Terminology (CPT) guidance on tobacco cessation services, refer to this guide released by the American Psychiatric Association.

Additional Resources

HIV/AIDS & Mental Health Training Resource Center tobacco cessation course: https://hivmentalhealth.edc.org/content/navigating-patient%E2%80%99s-tobacco-cessation-and-hiv-treatment-0

Resources to help patients quit smoking: https://www.psychiatry.org/news-room/apa-blogs/apa-blog/2016/03/resources-to-help-patients-quit-smoking

HIV/AIDS education and training materials from the American Psychiatry Association: www.psychiatry.org/aids

Journal Article: Smoking and life expectancy among HIV-infected individuals on antiretroviral therapy in Europe and North America: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4284008/